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			ANDERSON, JAMES D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/764,177 TENGLER ET AL. Office Action Summary Examiner Art Unit JAMES D. ANDERSON 1614 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 May 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.6.8-21.25-43 and 45-61 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1, 6, 8-21, 25-43, and 45-61 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTC-892) 4 Interview Summary (PTC-413)
2) Notice of Draftsperson's Patent Drawing Review (PTC-948) 73) Information Disclosure Statement(s) (PTC/SB/08) 5) 1-kotice of Informati-Patent Application
Paper Not(s)/Mail Date 6

1) Notice of Informati-Patent Application 6

1) Other:

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#### DETAILED ACTION

### Formal Matters

Applicants' response and amendments to the claims, filed 5/22/2008, are acknowledged and entered. Claims 1, 6, 8-21, 25-43, and 45-61 are pending and under examination.

## Claim Rejections - 35 USC § 112 - 1st Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 6, 8-21, 25-43, and 45-61 are again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. This is a written description rejection, rather than an enablement rejection under 35 U.S.C. 112, first paragraph. Applicant is directed to the Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, 1st "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

The claims are drawn to an enveloped pharmaceutical composition defined only by its release characteristics of the first active agent and second active agent.

Vas-Cath Inc. V. Mahurkar, 19 USPQ2d 1111, states that Applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention, for purposes of the written description inquiry, is whatever is now claimed (see page 1117). A review of the language of the claims indicates that these claims are drawn to generic compositions comprising a first and second active, i.e., generic enveloped pharmaceutical compositions defined only by the release profiles of the actives.

To provide adequate written description and evidence of possession of a claimed genus, the specification must provide sufficient distinguishing characteristics of the genus. The factors

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to be considered include disclosure of complete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, methods of making the claimed product, or any combination thereof.

In the instant case, the claims are replete with functional language that fails to define what the claimed pharmaceutical compositions are made of. Examples of such functional language include the following:

- i) "...a first active available for immediate release, wherein over 80% of the first active is released within 60 minutes..."; and
- ii) "a second active for extended release....and an extended release coating...and wherein over 80% of the second active is released between 90 minutes and 6 hours".

In the above examples, there is no description of what the composition is enveloped in, what excipients allow for the claimed release profile of the first active agent, what the carrier is composed of, what the beads are composed of, or what extended release excipients allow for the claimed release profile of second active agent. As such, the claims lack written description because the claimed pharmaceutical compositions are not adequately described in a manner that would indicate what the compositions are composed of.

The lack of written description of the instantly claimed compositions is further compounded by the fact that the compositions require specific release profiles of the first and second active agents. Accordingly, other than the specific formulations described in the examples (pages 23-25), Applicants have not described the enveloping materials, excipients, carriers, or extended release coatings, or the amounts of such components, that would result in the claimed first and second active agent release profiles.

Aside from the very limited examples provided in the specification, Applicants provide no direction as to (a) what excipients and extended release coatings out of all possible excipients and release coatings that exist in the art would have been reasonably expected to result in the claimed release profiles and (b) which of those excipients and extended release coatings actually do result in the claimed release profiles without having to execute hit or miss testing practices in order to make such a determination.

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The need for testing amongst varying species and amounts of excipients and release coatings to determine what combinations would result in the claimed release profiles demonstrates that Applicants were not in possession of the full scope of the compositions now presently claimed. "Possession may be shown in a variety of ways including description of an actual reduction to practice, or by showing that the invention was 'ready for patenting' such as by disclosure of drawings or structural chemical formulas that show that the invention was complete, or by describing distinguishing identifying characteristics sufficient to show that the Applicant was in possession of the claimed invention." Please see MPEP § 2163.

Despite the disclosure of specific in-actives, substrates, solubilizers, and other additives, e.g., pages 17-23 of the specification, it remains that the claims recite a solely functional pharmaceutical composition. With the exception of the specific formulations described in the examples, Applicants are imposing the burden of extensive testing upon the skilled artisan to identify those other excipients, carriers, in-actives, and extended release coatings that may result in the claimed release profiles of the first and second active agents, but which Applicants have not identified and thus, were not in possession of, at the time of the present invention.

It has been held in patent law that a wish or plan for obtaining the invention as claimed does not provide adequate written description of a chemical invention. Rather, a precise definition, such as by structure, formula, chemical name or physical properties or a combination thereof, is required. Please reference, e.g., Univ. of Rochester v. G.D. Searle & Co., 358 F.3d 916, 927, 69 USPQ2d 1886, 1894-95 (Fed. Cir. 2004). In other words, though Applicants may have a plan for how to identify other excipients, carriers, in-actives, and extended release coatings that may be amenable for use in the present invention, it remains that at the time of the invention, Applicants had not identified such excipients, carriers, in-actives, and extended release coatings, and, therefore, did not have written description of the full scope of the compositions now claimed.

Further, though Applicants have limited the claimed compositions to those that have particular release profiles of active agents, it remains that Applicants have not appropriately defined the metes and bounds of the claimed compositions, even when limited by function (stepplus-function form). As taught in the MPEP at § 2163, step-plus-function claims are not

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adequately described if "the written description adequately links or associates adequately described particular structure, material or acts to the function recited in a step-plus-function claim limitation," or if "it is clear based on the facts of the application that one skilled in the art would have known what structure, material, or acts perform the function recited in a step-plus-function limitation." The instant application fails to meet these criteria. The present specification provides no disclosure beyond the generic disclosure of the required function that would correlate a common structural element or material to performance of the claimed function and that would be readily identifiable to one of skill in the art. In the absence of sufficient recitation of distinguishing characteristics, the specification does not provide adequate written description of the claimed compositions, which are generic enveloped pharmaceutical compositions defined only in terms of the release profiles of the first and second actives. One of skill in the art would not recognize from the disclosure that the applicant was in possession of the genus. The specification does not clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed (see Vas-Cath at page 1116).

Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 U.S.C. 112 is severable from its enablement provision (see page 1115).

Applicant's arguments have been considered and are persuasive with regard to the description of "enveloped", but not with regard to the description of the claimed enveloped pharmaceutical compositions generally. Other than a broad disclosure of possible excipients, coatings, and additional additives, the claimed enveloped pharmaceutical compositions having the claimed release profiles of active agents have not been described, other than by the specific formulations in the examples, which comprise 7.5% phenylephrine immediate release beads coated with pharmaceutical glaze. Even in the examples, the coated beads that provide the claimed release profiles are specifically described as 10.93 kg of phenylephrine added to beads using 4.32 kg of "pharmaceutical glaze" (SR mix #1), 7.15 kg of SR mix #1 and 4.96 kg of pharmaceutical glaze, 4.75 kg of SR mix #1 and 2.68 kg of pharmaceutical glaze (second load), 5.92 kg of SR mix #1 and 3.43 kg of pharmaceutical glaze (third load), and 7.78 kg of SR mix #1 and 4.56 kg of pharmaceutical glaze (fourth load). Thus, other than phenylephrine for extended release comprising 10.93 kg of phenylephrine added to beads using 4.32 kg of "pharmaceutical glaze" (SR mix #1), 7.15 kg of SR mix #1 and 4.96 kg of pharmaceutical glaze, 4.75 kg of SR

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mix #1 and 2.68 kg of pharmaceutical glaze (second load), 5.92 kg of SR mix #1 and 3.43 kg of pharmaceutical glaze (third load), and 7.78 kg of SR mix #1 and 4.56 kg of pharmaceutical glaze (fourth load), Applicants have not described the claimed "extended release coatings" that provide the claimed release profiles.

With regard to Applicant's arguments regarding the step-plus-function named in the Office action, although the claims are not method claims that achieve a particular function, the compositions as claimed do require specific release profiles of active agents that are intimately related to what the compositions are composed. One cannot simply mix guaifenesin and phenylephrine, place the mixture in a capsule, and achieve the claimed release profiles. Similarly, one cannot simply coat phenylephrine beads with any coating, in any amount, and achieve the claimed release profile of phenylephrine. As taught in the MPEP at § 2163, step-plus-function claims are not adequately described if "the written description adequately links or associates adequately described particular structure, material or acts to the function recited in a step-plus-function claim limitation," or if "it is clear based on the facts of the application that one skilled in the art would have known what structure, material, or acts perform the function recited in a step-plus-function limitation." In this case, the "function" of the claims is the claimed release profile. The written description in the specification does not link these release profiles to a particular structure or material and one skilled in the art would not know what structures or materials (i.e., excipients and/or coatings) result in the claimed release profiles.

## Claim Rejections - 35 USC § 103 - New Ground of Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6, 8-21, 25-43, and 45-61 are again rejected under 35 U.S.C. § 103(a) as being unpatentable over **Devane** et al. (U.S. Patent No. 6,228,398; Issued May 8, 2001) in view of **Dang** et al. (U.S. Patent No. 6,462,094; Issued Oct. 8, 2002) (cited by applicants) and **Davis** et al. (US 2003/0049318 A1; Published Mar. 13, 2003) (prior art of record). <sup>1</sup>

The instant claims are drawn to enveloped pharmaceutical compositions comprising a first active for immediate release and a second active for extended release wherein the first active is disposed on a carrier and the second active is disposed on a bead (e.g. Claim 1). Applicants state that the problem to be solved in the prior art at page 4, ¶ [0013]:

"It has been found, however, that the present methods fail to provide an efficacious amount of a first active ingredient in an immediate release form and a second active that is provided as an extended release formulation that takes advantage of the pharmacological effect of the immediate release active to maximize the efficiency of the delivery and pharmacological action of the second active. Yet another problem is that certain drugs affect the release profile of a second drug that is being provided in a single dose. The present invention solves these problems in the art."

To solve the prior art problems as presented in the instant case, one skilled in the art would need the means to formulate an enveloped composition comprising a first active for immediate release and a second active for extended release (wherein the first and second actives are provided on separate carriers). The skilled artisan would also need a motivation to formulate such a composition with guaifenesin and phenylephrine. Examiner herein presents a prima facie case of why the instantly claimed compositions would have been obvious to one of ordinary skill in the art.

<sup>&</sup>lt;sup>1</sup> Devanc et al. qualifies as prior art under 35 U.S.C. § 102(b). Dang et al. and Davis et al. qualify as prior art under 25 U.S.C. § 102(a) and 102(e).

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Devane et al. disclose multi-particulate modified release compositions that deliver active ingredients in a pulsed or bimodal manner (Abstract). One object of the invention is to provide a multi-particulate modified release composition in which a first portion of the active ingredient is released immediately upon administration and a second portion is released rapidly after an initial delay period (i.e. extended release) in a bimodal manner (col. 3, lines 51-56). The first and second components are disposed on separate carriers (i.e. particles) (col. 4, lines 10-14) and can be the same or different (col. 4, lines 14-16). The active ingredient-containing particles of the second component are coated with a modified release coating (col. 4, lines 15-18). In a preferred embodiment, the first component is an immediate release component (col. 4, lines 24-26). The patentees further contemplate combined therapy. For example, when the first and second components are different, an enhancer compound or a sensitizer compound in another component of the composition may accompany the drug compound present in one component in order to modify the bioavailability or therapeutic effect of the drug compound (col. 6, line 64 to col. 7, line 8). By modifying the excipients or coatings of the particles, the time-release characteristics of the active ingredient from each component may be varied (col. 7, lines 38-42). The invention of Devane et al. is exemplified in a preferred embodiment as recited at col. 8, lines 22-29) (emphasis added):

In a preferred embodiment, the multi-particulate modified release composition according to the present invention has an <u>immediate release component</u> and <u>at least one modified release component</u>, the immediate release component comprising a first population of active ingredient containing particles and the modified release components comprising second and subsequent populations of active ingredient containing particles.

The reference thus teaches first and second actives that are different being composed on separate carriers. The multi-particle modified release composition according to the reference may be incorporated into any suitable dosage form, including filling into capsules, such as hard or soft gelatin capsules or compressed into mini-tabs and subsequently filled into capsules (col. 10, lines 15-27), thus teaching an "enveloped" composition. The compositions taught in the reference can also include one or more inactives as recited in instant claims 18, 38, and 58 (Table 2). The

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reference also discloses the instantly claimed dissolution rates recited in claims 6, 8, 25-27, 40 and 46-48 (col. 12, lines 15-21 and Table 3).

Thus, while Devane et al. provide the means to formulate an enveloped composition of a first active for immediate release and a second active for extended release, they do not teach that the first active comprises guaifenesin or that the second active comprises phenylephrine. Devane et al. also do not teach that the second active is selected from the group consisting of a decongestant, an antihistamine, an expectorant, or an antitussive.

However, Dang et al. is provided as evidence that combined guaifenesin and phenylephrine compositions were known in the art at the time the present invention was made. The patentees disclose that guaifenesin has an expectorant action, which increases the output of respiratory tract fluid by reducing adhesiveness and surface tension (col. 2, lines 3-5). The compositions described in Dang et al., comprising guaifenesin and phenylephrine, provide the immediate expectorant action of guaifenesin and the prolonged decongestant action of phenylephrine (col. 2, lines 11-13). The compositions may be prepared for oral administration in the form of powders, capsules, elixirs, syrups and the preferred forms of tablets or suspensions (col. 2, lines 15-17). The reference thus provides one skilled in the art with the motivation to formulate a composition comprising guaifenesin and phenylephrine wherein the patentees state that the combination produces a composition possessing "sympathornimetic decongestant and expectorant properties superior to the use of either one of the compounds alone" (col. 1, line 65 to col. 2, line 3). Dang et al. differ from the instant claims in that they do not teach a composition comprising guaifenesin available for immediate release and a decongestant (e.g., phenylephrine) available for extended release.

However, Davis *et al.* disclose immediate and sustained release formulations of guaifenesin and additional drug ingredients, including antitussives (*e.g.* codeine) and decongestants (*e.g.* phenylephrine) (Abstract; page 4, ¶ [0045]). Said formulations relate to sustained release preparations in the form of capsules having beads or granules of both immediate release formulation and beads or granules of sustained release formulation, thus teaching or suggesting the limitations of claims 1, 9, 12-15, 19-21, 28-30, 32-35, 37, 39-43, 49-50, 52-55, 57, and 59-61 (page 2, ¶ [0019]). Davis *et al.* explicitly contemplate capsules (*i.e.* enveloped composition) having a combination of "beads or granules of immediate release

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formulation and beads or granules of <u>sustained release formulation</u>" (i.e. disposed in separate carriers) (page 4,  $\P$  [0043]). They go on to state that the invention will be described in detail in the context of the bi-layer tablet embodiment (id.). "Granules" (page 4,  $\P$  [0043]) of immediate release guaifenesin read on guaifenesin "in a powder form" as instantly claimed (e.g. claim 10). The formulations of the invention can also include other excipients (page 4,  $\P$  [0050]), thus teaching the limitations of claims 18 and 38. The reference thus motivates and suggests capsules containing both immediate release and sustained release formulations that can reasonably contain guaifenesin and phenylephrine.

The cited prior art discloses compositions comprising guaifenesin and phenylephrine, both in immediate release and immediate/sustained release formulations. The cited prior art also provides methods for formulating drug compositions comprising immediate release granules or beads and sustained released beads in an enveloped composition having the dissolution profiles instantly claimed. The prior art differs from the instant claims in that no single reference discloses enveloped compositions comprising an immediate release agent (e.g. guaifenesin) and a sustained release agent that is a decongestant (e.g. phenylephrine) disposed on separate carriers having the dissolution profiles instantly claimed. The level of ordinary skill in the art is that of an M.D., Ph.D. or pharmacist.

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to modify the multi-particle modified release compositions disclosed in Devane et al. and Davis et al. by providing immediate release guaifenesin and extended release phenylephrine particles. Dang et al. and Davis et al. both provide the motivation to do so. Dang et al. disclose that combined guaifenesin/phenylephrine compositions provide immediate decongestant action of guaifenesin and extended expectorant action of phenylephrine. Davis et al. disclose compositions comprising immediate release guaifenesin and sustained release guaifenesin with additional drug ingredients, including the instantly claimed antitussives and decongestants (e.g. phenylephrine). Although Davis et al. exemplify bi-layer tablet formulations, capsules containing immediate release and sustained release beads are also disclosed. It is noted that the dissolution profiles disclosed in Davis et al. for sustained release formulations are longer than those instantly claimed. However, it well within the level of

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ordinary skill in the art to modify release profiles of drugs by changing the sustained release layer as evidenced by Devane et al.

Thus, one skilled in the art had the means (Devane et al. and Davis et al.) and the motivation (Dang et al. and Davis et al.) to formulate an enveloped composition comprising an immediate release first active and a sustained release second active wherein the first and second actives are disposed on separate carriers and the first active is guaifenesin and the second active is phenylephrine. Applicants have provided no evidence of unexpected results with the instantly claimed compositions of guaifenesin and phenylephrine.

Applicant's arguments have been carefully considered but they are not persuasive that the claimed compositions are unobvious over the cited prior art. Firstly, Applicants argue that Devane does not achieve the claimed release profiles. However, as discussed supra, one skilled in the art with the knowledge of the cited prior art, could readily modify the coatings and amounts of coatings exemplified in Devane and Davis in order to achieve any desired release profile of active agent, including those release profiles recited in the instant claims. Such modification of release profiles is more than routine in the art of extended release pharmaceutical compositions. Secondly, Applicants argue that Devane is not enabling as to any modifications of the release profile or how to modify those release profiles. This argument is not persuasive because Applicants have provided no factual evidence to support this allegation of lack of enablement of the Devane reference. In fact, Devane explicitly teaches how one skilled in the art can modify the time-release characteristics of the active ingredients stating, "by modifying the excipients or coatings of the particles, the time-release characteristics of the active ingredient from each component may be varied" (col. 7, lines 38-42). Thirdly, Applicants argue that Dang does not teach a first active for immediate release and a second active for extended release. However, Dang is provided only as a suggestion and motivation to combine guaifenesin and phenylephrine in a single pharmaceutical composition as claimed. As discussed supra, Devane and Davis provide the requisite teachings regarding compositions comprising a first active for immediate release and a second active for extended release. Fourthly, Applicants argue that there is no likelihood of success or motivation to combine because the combination would yield the combination unsatisfactory for the desired function. In support of this argument, Applicant argues that Devane's release is substantially delayed. However, the instant claims do not

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preclude a delay of the second active. The claims only require that over 80% of the second active is released between 90 minutes and 6 hours. As such, the claims allow for the second active released being delayed for 2 hours, after which over 80% is released between 2 and 6 hours.

In summary, the teachings of the cited prior art, when taken as a whole, teach, suggest, and motivate one skilled in the art to formulate an enveloped pharmaceutical composition comprising an immediate release active agent and an extended release second active as taught in Davis et al., who disclose immediate and sustained release formulations of guaifenesin and additional drug ingredients, including antitussives (e.g. codeine) and decongestants (e.g. phenylephrine). One skilled in the art of extended release pharmaceutical compositions has the required knowledge and skill to, as explicitly taught in Devane, modify the excipients or coatings of the particles to vary the time-release characteristics of the active ingredient from each component.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES D. ANDERSON whose telephone number is (571)272-9038. The examiner can normally be reached on MON-FRI 9:00 am - 5:00 pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James D Anderson/ Examiner, Art Unit 1614

/Ardin Marschel/ Supervisory Patent Examiner, Art Unit 1614